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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,621	02/16/2000	Mark A. Hollar	M-7348 US	6010

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MORRISON & FOERSTER LLP  
755 PAGE MILL RD  
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EXAMINER

DAVIS, ZACHARY A

ART UNIT	PAPER NUMBER
2137	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/505,621	HOLLAR ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Zachary A Davis	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- ~~4a) Of the above claim(s) 7-40 is/are withdrawn from consideration.~~
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. An amendment was received on 14 June 2004. Claims 1-41 are pending in the present application. Claims 1 and 5 have been amended. Claims 7-40 are withdrawn from further consideration. No claims have been added or canceled.

#### ***Drawings***

2. Examiner's objections to Figures 1D and 4 under 37 CFR 1.84(p)(4) and to Figures 1A, 1C, 1D, and 3 for informalities are withdrawn in light of the revised formal drawings submitted.

#### ***Specification***

3. The objection to the disclosure for informalities is withdrawn in light of the amendments to the specification.

#### ***Claim Objections***

4. The objection to Claims 1 and 5 for informalities is withdrawn in light of the amendments to those claims.

***Claim Rejections - 35 USC § 112***

5. The rejection of Claims 4 and 41 under 35 U.S.C. 112, second paragraph, is withdrawn.

***Claim Rejections - 35 USC § 102***

6. The rejection of Claims 1-3 and 5-6 under 35 U.S.C. 102(e) as being anticipated by Linnartz, US Patent 6209092, is withdrawn in consideration of Applicant's arguments, see pages 13-14, filed 14 June 2004.

***Response to Arguments***

7. Applicant's arguments with respect to claims 1-6 and 41 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 1-3 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linnartz, US Patent 6209092, in view of Callway et al, US Patent 6356704.

In reference to Claim 1, Linnartz discloses a method including supplying a video signal (for example, from disc 11 in Figure 1), embedding a watermark in the video signal (column 6, lines 5-16), and providing data associated with the watermark (column 6, lines 17-18; see column 6, lines 33-40, where the watermark is a function of the ticket T; see also column 5, lines 3-5 and 52-54) in a video line of the vertical blanking interval (column 6, lines 8-11). However, ~~Linnartz does not explicitly disclose sending the associated data on a line of the~~ vertical blanking interval carrying parental blocking data.

Callway discloses a method for detecting protection of video signals that includes an indication of protection (column 2, lines 61-66) that can be used for both parental control and copy protection (column 3, lines 5-10). Callway further discloses that the data access parameter is included in the vertical blanking interval of the video signal (column 3, lines 35-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Linnartz by sending the data associated with the watermark on a line of the vertical blanking interval that also carries parental blocking data, in order to allow for a further layer of control over the video data by prohibiting unauthorized access according to parental controls in addition to preventing unauthorized copying (see Callway, column 2, lines 25-31). One would be further motivated to modify the method of Linnartz as

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indicated in order to insure that a personal computer cannot gain unauthorized access or make unauthorized copies of video data (see Callway, column 1, lines 55-58, and column 2, lines 31-35).

In reference to Claim 2, Linnartz further discloses that the associated data is a cryptographic value (column 6, lines 17-18, where ticket T is a cryptographic counter).

In reference to Claim 3, Linnartz further discloses that the cryptographic value is a hash function of a seed (column 6, lines 57-58, where F is a one-way function) and that the watermark is a multiple hash function of the seed (column 6, lines 59-60).

In reference to Claim 5, Linnartz discloses an apparatus including a seed generator (column 6, lines 1 and 55-57), a hash function generator receiving a seed and producing data (see column 5, lines 3-5 and subsequent, describing a one-way function; see also column 6, lines 57-58), a watermark generator receiving the seed and embedding the watermark (see column 6, lines 5-16 and 59-60), and a transmission channel transmitting the watermark and data (column 6, lines 5-16). However, Linnartz does not explicitly disclose sending the associated data on a line of the vertical blanking interval carrying parental blocking data.

Callway discloses an apparatus for detecting protection of video signals that includes an indication of protection (column 2, lines 61-66) that can be used for both parental control and copy protection (column 3, lines 5-10). Callway

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further discloses that the data access parameter is included in the vertical blanking interval of the video signal (column 3, lines 35-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Linnartz by sending the data associated with the watermark on a line of the vertical blanking interval that also carries parental blocking data, in order to allow for a further layer of control over the video data by prohibiting unauthorized access according to parental controls in addition to preventing unauthorized copying (see Callway, column 2, lines 25-31). One would be further motivated to modify the apparatus of Linnartz as indicated in order to insure that a personal computer cannot gain unauthorized access or make unauthorized copies of video data (see Callway, column 1, lines 55-58, and column 2, lines 31-35).

In reference to Claim 6, Linnartz further discloses that the watermark is a multiple hash function of the seed (column 6, lines 59-60).

10. Claims 4 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linnartz in view of Callway as applied to Claims 1 and 5 above, and further in view of Applicant's admitted prior art.

Linnartz as modified by Callway teaches sending data associated with a watermark on a line of the vertical blanking interval that also carries parental blocking data. However, neither Linnartz nor Callway specifically disclose using line 21 of the vertical blanking interval.

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Applicant admits that line 21 of the vertical blanking interval is used to carry parental blocking data (page 5, lines 23-28 of Applicant's specification) or other extended data services (page 6, lines 13-15). Additionally, Applicant admits that televisions and personal computers with television tuner cards must, by law, be able to detect line 21 data (page 5, line 31-page 6, line 7). Applicant further states that it has been known for many years that video line 21 is suitable for carrying supplemental digital data (page 19 of Applicant's arguments, filed 14 June 2004).

Therefore, it would have been obvious to one of ordinary skill in the art to ~~further modify the method and apparatus of Linnartz as modified by Callway, by~~ using line 21 of the vertical blanking interval to carry both the parental blocking data and the associated data, collectively referred to as the data access parameter or indication of protection as taught by Callway, since parental blocking data is already carried on line 21 (see page 5, line 23-page 6, line 15 of Applicant's specification).

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Ryan, US Patent 5058157, discloses a system for the protection of video signals that sends encrypted data, which is associated with the



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prevention of copying and the control of viewing, on line 21 of the vertical blanking interval.

b. Azadegan et al, US Patent 5612900, discloses a video encoding system in which copy and parental management data are encoded in the same field.

c. Horlander, US Patent 6437830, discloses a system sending ancillary data, which may pertain to copy protection, in the vertical blanking interval of a video signal

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~~Any inquiry concerning this communication or earlier communications from~~  
the examiner should be directed to Zachary A Davis whose telephone number is (571) 272-3870, as of October 2004. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*END*  
zad

*Matthew Smithers*  
**MATTHEW SMITHERS**  
**PRIMARY EXAMINER**  
*Art Unit 2137*